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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,282	12/22/2005	Christianus Hermanus Leopold Weijtens	DE030223	5688
24737 7590 04/14/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
PIZIALI, JEFFREY J				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
04/14/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/562,282

**Applicant(s)**WEIJTENS, CHRISTIANUS  
HERMANUS LEOPOLD**Examiner**

Jeff Piziali

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2009 and 16 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 and 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date _____                                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

2. The drawings were received on *16 July 2008*. These drawings are acceptable.
3. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the figures.

#### ***Specification***

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Election/Restrictions***

5. ***Applicant's election without traverse of Species I (claims 1-6 and 10-15)*** in the reply filed on *12 January 2009* is acknowledged and appreciated.
6. Claims 7-9 and 16-19 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on *12 January 2009*.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:
- The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
8. Claims 10 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Claim 10 recites the limitation "***the display elements are arranged in  $N$  rows and  $M$  columns, and wherein a number of external connections for controlling the display unit is  $N + M$*** " (line 1-3).

Claim 13 recites the limitation "***a number of external connections for controlling the display unit is  $N + M$*** " (line 2-3).

However, the instant invention states that a conventional "*display has a total number of  $N + M$  external electrical connections*" (see Page 1, Line 9).

One of the alleged benefits or features of the instant invention is disclosed as reducing such a high number of connections (see Page 1, Line 15).

Therefore, the above cited subject matter renders it unclear whether or not any of the pending claims are directed to the instant invention as disclosed.

9. Claims 10 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 10 recites the limitation "*the display elements are arranged in  $N$  rows and  $M$  columns, and wherein a number of external connections for controlling the display unit is  $N + M$* " (line 1-3).

Claim 13 recites the limitation "*a number of external connections for controlling the display unit is  $N + M$* " (line 2-3).

However, the instant invention states that a conventional "*display has a total number of  $N + M$  external electrical connections*" (see Page 1, Line 9).

One of the alleged benefits or features of the instant invention is disclosed as reducing such a high number of connections (see Page 1, Line 15).

Therefore, the above cited subject matter renders it unclear whether or not any of the pending claims are directed to the instant invention as disclosed.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-6 and 10-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*switches*" (line 7); "*a first set of switches*" (line 22); and "*a second set of switches*" (line 23).  
For example:

It would be unclear to one having ordinary skill in the art if these initiations are intended to be common to, identical to, or distinct from, one another.

An omitted structural cooperative relationship results from the claimed subject matter: "*inverters*" (line 8) and "*an inverter*" (line 14). For example:

It would be unclear to one having ordinary skill in the art if these initiations are intended to be common to, identical to, or distinct from, one another.

13. Claim 1 recites the limitation "*a second clock*" (line 17). There is insufficient antecedent basis for this limitation in the claim. For example:

A "*first clock*" has not been earlier claimed.

14. Claim 1 recites the limitation "*the second clock signal*" (line 23). There is insufficient antecedent basis for this limitation in the claim.

15. Claim 1 is amenable to two or more plausible claim constructions.

The use of the phrase "*consecutive application of a third clock signal*" (line 24) renders the claim indefinite.

The claimed "*consecutive application*" is amenable to two plausible definitions.

Based on the description provided in the Specification, "*consecutive application*" could be interpreted to mean:

- (a) Constant application.
- (b) Application following the first clock signal.
- (c) Application following the second clock signal.

Thus, neither the Specification, nor the claims, nor the ordinary meanings of the words provides any guidance as to what Applicant intends to cover with this claim language.

Due to the ambiguity as to what is intended by the claimed "*consecutive application*" and the fact that this claim element is amenable to two or more plausible claim constructions, this claim is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to

particularly point out and distinctly claim the subject matter that the Applicant considers to be the invention.

See Ex parte Miyazaki (BPAI Precedential 19 November 2008).

16. Claims 2-6 recite the limitation "*the integrated display unit*" (line 1). There is insufficient antecedent basis for this limitation in the claims.

17. The term "*N*" in claim 10 (line 2) is a relative term which renders the claim indefinite. The term "*N*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what this limitation, term, and/or variable is intended to represent.

18. The term "*M*" in claim 10 (line 2) is a relative term which renders the claim indefinite. The term "*M*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what this limitation, term, and/or variable is intended to represent.



19. The term "**external**" in claim 10 (line 3) is a relative term which renders the claim indefinite. The term "**external**" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what element(s) the "*connections*" are intended to be "*external*" relative to.

20. Claim 10 recites the limitation "*the display elements are arranged in  $N$  rows and  $M$  columns, and wherein a number of external connections for controlling the display unit is  $N + M$* " (line 1-3).

However, the instant invention states that a conventional "*display has a total number of  $N + M$  external electrical connections*" (see Page 1, Line 9).

One of the alleged benefits or features of the instant invention is disclosed as reducing such a high number of connections (see Page 1, Line 15).

Therefore, the above cited subject matter renders it unclear whether or not any of the pending claims are directed to the instant invention as disclosed.

21. The term " **$N$** " in claim 11 (line 2) is a relative term which renders the claim indefinite. The term " **$N$** " is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what this limitation, term, and/or variable is intended to represent.

22. The term "**external**" in claim 11 (line 2) is a relative term which renders the claim indefinite. The term "**external**" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what element(s) the "**connections**" are intended to be "**external**" relative to.

23. Claim 12 is amenable to two or more plausible claim constructions.

The use of the phrase "**connectable**" (lines 4 and 5) renders the claim indefinite.

The claimed "**connectable**" is amenable to two plausible definitions.

Based on the description provided in the Specification, "**connectable**" could be interpreted to mean:

(a) Capable of connection.

(b) Connected.

Thus, neither the Specification, nor the claims, nor the ordinary meanings of the words provides any guidance as to what Applicant intends to cover with this claim language.

Due to the ambiguity as to what is intended by the claimed "**connectable**" and the fact that this claim element is amenable to two or more plausible claim constructions, this claim is

rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicant considers to be the invention.

See Ex parte Miyazaki (BPAI Precedential 19 November 2008).

24. The term "*N*" in claim 13 (line 2) is a relative term which renders the claim indefinite. The term "*N*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what this limitation, term, and/or variable is intended to represent.

25. The term "*M*" in claim 13 (line 2) is a relative term which renders the claim indefinite. The term "*M*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what this limitation, term, and/or variable is intended to represent.

26. The term "*external*" in claim 13 (line 3) is a relative term which renders the claim indefinite. The term "*external*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what element(s) the "*connections*" are intended to be "*external*" relative to.

27. Claim 13 recites the limitation "*a number of external connections for controlling the display unit is  $N + M$* " (line 2-3).

However, the instant invention states that a conventional "*display has a total number of  $N + M$  external electrical connections*" (see Page 1, Line 9).

One of the alleged benefits or features of the instant invention is disclosed as reducing such a high number of connections (see Page 1, Line 15).

Therefore, the above cited subject matter renders it unclear whether or not any of the pending claims are directed to the instant invention as disclosed.

28. The term "*N*" in claim 14 (line 2) is a relative term which renders the claim indefinite. The term "*N*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what this limitation, term, and/or variable is intended to represent.

29. The term "*external*" in claim 14 (line 2) is a relative term which renders the claim indefinite. The term "*external*" is not defined by the claim, the specification does not provide a

standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example:

It would be unclear to one having ordinary skill in the art what element(s) the "connections" are intended to be "external" relative to.

30. The remaining claims are rejected under 35 U.S.C. 112, second paragraph, as being dependent upon rejected base claims.

31. The claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

As a courtesy to the Applicant, the examiner has attempted to also make rejections over prior art -- based on the examiner's best guess interpretations of the invention that the Applicant is intending to claim.

However, the indefinite nature of the claimed subject matter naturally hinders the Office's ability to search and examine the application.

Any instantly distinguishing features and subject matter that the Applicant considers to be absent from the cited prior art is more than likely a result of the indefinite nature of the claims.

The Applicant is respectfully requested to correct the indefinite nature of the claims, which should going forward result in a more precise search and examination.

***Claim Rejections - 35 USC § 102 / 103***

32. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

33. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

34. Claims 1-9 are rejected under 35 U.S.C. 102(b) as anticipated by *Hebiguchi (US 6,292,237 B1)* or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Hebiguchi (US 6,292,237 B1)* in view of *Reita (REITA C: "Integrated Driver Circuits for Active Matrix Liquid Crystal Displays," Vol. 14, No. 2, 1993, pages 104-114)*.

Regarding claim 1, *Hebiguchi* discloses a display unit [e.g., Fig. 9A] comprising:  
a display [e.g., Fig. 9A: 41] including display elements [e.g., Fig. 11: PX] which are combined into groups of display elements [e.g., Fig. 10: G1a-G480a],  
a circuit arrangement [e.g., Fig. 10: 46] for controlling the display,  
the circuit arrangement including switches [e.g., Fig. 10: 131A, 133A] and inverters [e.g., Fig. 10: 132A, 134A] which are connected in series to form a series arrangement,  
each group of the groups of display elements is connected to an output of an inverter, and  
at least one clock bus line [e.g., Fig. 10: CK1, CK2] to supply a first clock signal [e.g., Fig. 10: CK1] and a second clock [e.g., Fig. 10: CK2], wherein

a first set of switches [e.g., Fig. 10: 131A] is closed with the first clock signal when a second set of switches [e.g., Fig. 10: 133A] is opened with the second clock signal [e.g., Fig. 10: CK2] so that

after consecutive application of a third clock signal [e.g., Fig. 10: SP4] to an input of the series arrangement,

at least one of the groups of display elements is activated (*see the entire document, including Column 8, Line 53 - Column 9, Line 45*).

Should it be shown that **Hebiguchi** teaches the claimed "inverter" subject matter with insufficient specificity:

**Reita** discloses an inverter being formed by a parallel arrangement of a p-transistor and a second n-transistor (*see the entire document, including Fig. 5(b): Page 109*).

**Hebiguchi** and **Reita** are analogous art, because they are from the shared inventive field of shift registers comprising inverters for driving display units.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Reita's** CMOS inverter [Fig. 5(b)] to form **Hebiguchi's** inverters [e.g., Fig. 10: 132A, 134A], so as to use a commonly known and well understood inverter circuit that results in low operational power consumption.

Regarding claim 2, **Hebiguchi** discloses a carrier on which the display elements are arranged in a display field, wherein

the at least one clock bus line extends along an edge of the display field (*see the entire document, including Figs. 9A, 9B, 10; and Column 8, Line 53 - Column 9, Line 45*).

Regarding claim 3, **Hebiguchi** discloses the groups of display elements are each formed by a row or a column of a matrix display (*see the entire document, including Fig. 10; and Column 8, Line 53 - Column 9, Line 45*).

Regarding claim 4, **Hebiguchi** discloses each switch of the switches is formed by a first n-transistor, and

each inverter of the inverters is formed by a parallel arrangement of a p-transistor and a second n-transistor (*see the entire document, including Fig. 10; and Column 8, Line 53 - Column 9, Line 45*).

**Reita** discloses each inverter of the inverters is formed by a parallel arrangement of a p-transistor and a second n-transistor (*see the entire document, including Fig. 5(b); Page 109*).

Regarding claim 5, **Hebiguchi** discloses the groups of display elements are connected to respective outputs of the inverters of the series arrangement (*see the entire document, including Fig. 10; and Column 8, Line 53 - Column 9, Line 45*).



Regarding claim 6, **Hebiguchi** discloses the groups of display elements include sampled rows or sampled columns of a matrix display (*see the entire document, including Fig. 10; and Column 8, Line 53 - Column 9, Line 45*).

Regarding claim 10, **Hebiguchi** discloses the display elements are arranged in N rows and M columns, and wherein

a number of external connections for controlling the display unit is  $N + M$  (*see the entire document, including Figs. 10-11; and Column 8, Line 53 - Column 9, Line 45*).

Regarding claim 11, **Hebiguchi** discloses the display elements are arranged in N rows, and wherein

a number of external connections for controlling the display unit is 5 or 7 (*see the entire document, including Fig. 10; and Column 8, Line 53 - Column 9, Line 45*).

**Reita** discloses each inverter of the inverters is formed by a parallel arrangement of a p-transistor and a second n-transistor (*see the entire document, including Fig. 5(b); Page 109*).

Using **Reita's** CMOS inverter [Fig. 5(b)] to form **Hebiguchi's** inverters [*e.g.*, Fig. 10: 132A, 134A] would result in the number of external connections for controlling the display unit being 5 or 7.

Regarding claim 12, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, **Hebiguchi** discloses a display unit [*e.g.*, Fig. 9A] comprising:

display elements [e.g., Fig. 10: G1a-G480a];

series arrangements [e.g., Fig. 10: 46, Reg1-Reg480] between the display elements,

wherein

each of the series arrangements includes a first switch [e.g., Fig. 10: 131A] connectable to a first inverter [e.g., Fig. 10: 132A] and

a second switch [e.g., Fig. 10: 133A] connectable to a second inverter [e.g., Fig. 10: 134A];

a first bus for a first clock [e.g., Fig. 10: CK1] for controlling the first switch;

a second bus for a second clock [e.g., Fig. 10: CK2] for controlling the second switch;

wherein

the first switch and the second switch are alternately controlled by the first clock and the second clock, respectively, so that

when the first switch is opened then the second switch is closed; and

a third bus for a third clock [e.g., Fig. 10: SPA] for application to an input of one of the series arrangements so that

groups of the display elements are consecutively activated (*see the entire document, including Column 8, Line 53 - Column 9, Line 45*).

Should it be shown that *Hebiguchi* teaches the claimed "inverter" subject matter with insufficient specificity:

**Reita** discloses an inverter being formed by a parallel arrangement of a p-transistor and a second n-transistor (*see the entire document, including Fig. 5(b): Page 109*).

**Hebiguchi** and **Reita** are analogous art, because they are from the shared inventive field of shift registers comprising inverters for driving display units.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Reita's** CMOS inverter [*Fig. 5(b)*] to form **Hebiguchi's** inverters [*e.g., Fig. 10: 132A, 134A*], so as to use a commonly known and well understood inverter circuit that results in low operational power consumption.

Regarding claim 13, **Hebiguchi** discloses the display elements are arranged in N rows and M columns, and wherein

a number of external connections for controlling the display unit is  $N + M$  (*see the entire document, including Figs. 10-11; and Column 8, Line 53 - Column 9, Line 45*).

Regarding claim 14, **Hebiguchi** discloses the display elements are arranged in N rows, and wherein

a number of external connections for controlling the display unit is 5 or 7 (*see the entire document, including Fig. 10; and Column 8, Line 53 - Column 9, Line 45*).

**Reita** discloses each inverter of the inverters is formed by a parallel arrangement of a p-transistor and a second n-transistor (*see the entire document, including Fig. 5(b): Page 109*).

Using *Reita's* CMOS inverter [Fig. 5(b)] to form *Hebiguchi's* inverters [e.g., Fig. 10: 132A, 134A] would result in the number of external connections for controlling the display unit being 5 or 7.

Regarding claim 15, *Hebiguchi* discloses at least one of the first bus and the second bus is arranged along an edge of the display unit (*see the entire document, including Figs. 9A, 9B, 10; and Column 8, Line 53 - Column 9, Line 45*).

#### ***Response to Arguments***

35. Applicant's arguments filed 16 July 2008 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1-6 and 10-15 have been considered but are moot in view of the new ground(s) of rejection.

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

***Conclusion***

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Piziali/  
Primary Examiner, Art Unit 2629  
9 April 2009